TABLE I

Unusual Radar Echoes observed at East Hill

Date	Time (GMT)	Height (feet)	Direction (°T) and speed (kt.) of movement of echoes	Probable upper wind	Height of inversion or isothermal layer				Remarks
					Larkhill		Hemsby		
					Time (GMT)	Height (feet)	Time (GMT)	Height (feet)	
10/12/51	1700 -1800	0 to 5,000	-	345°T 25kt. at 5,000ft.	1500 2100	7100 - 8300 0 - 700 700 - 1000 6800 - 8000	1500 2100	0 - 600 6200 - 6600	Clear skies, many pin-point echoes.
18/1/52	1730 -1800	3,000 to 5,000	010°T 40kt. approx.	350°T 40kt. at 5,000ft.	1500 2100	0 - 800 4280 - 4720 0 - 800	1500 2100	6000 - 6400 0 - 300	Clear skies.
1/2/52	1800 -1900	3,000 to 4,000	345 - 350°T possibly 25 - 30 kt.	310°T 27kt. at 4,000ft.	1500	None	1500	None	Clear skies. Few echoes.
20/2/52	1540 -1845	4,000 to 5,000	260 - 290°T probably 40 - 45 kt.	310°T 20kt. at 5,000ft.	1500	5240 - 6200 6200 - 8760	1500	3630 - 5210	Variable cloud, mainly large amounts of Sc.
21/2/52	1000 -1100	500 to 2,000	250 - 290°T about 60 kt.	290°T 20kt. at 2,000ft.	1500	3480 - 5450	1500	2630 - 3530 5600 - 6350 8040 - 8430	Few echoes.
"	1655 -1727	3,000	290°T 45 kt.	290°T 20kt. at 3,000ft.					One echo followed for 32 min. Mainly cloudy, 7/8-8/8 Sc.
22/2/52	1720 -1840	3,000 to 5,500	Variable about 65 kt.	285°T or variable 10-15 kt. at 3 - 5,000ft.	1500	3280 - 4110	1500	2700 - 3370 9350 - 9600	Several echoes. Cloudy.
5/3/52	0950 -1200	2,000 to 3,000	270 - 290°T 50 - 55 kt.	280°T 25kt. at 2,000ft.	1500	6160 - 7050	1500	None	Immediately in rear of frontal echo.
"	1730 -1740	2,000 to 5,000	260 - 270°T 55 - 60 kt.	260°T 25kt. to 6,000ft.					Broken cloud, many echoes.
"	2030 -2220	2,500 to 9,500	255 - 285°T 40 - 50 kt.	270°T 25kt. to 8,000ft.					Large clearances in cloud. Very extensive echoes in layers

G.336607(a)/PN/7/52/40

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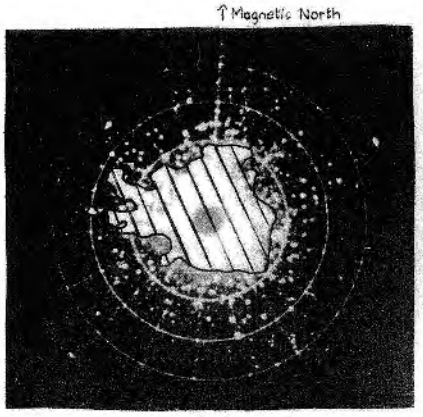
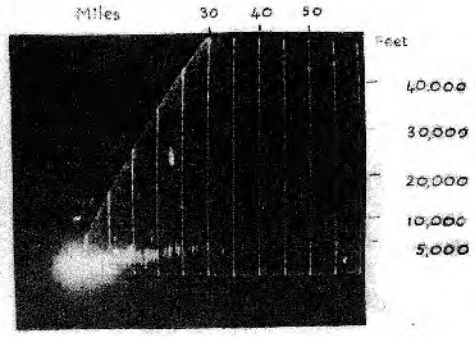
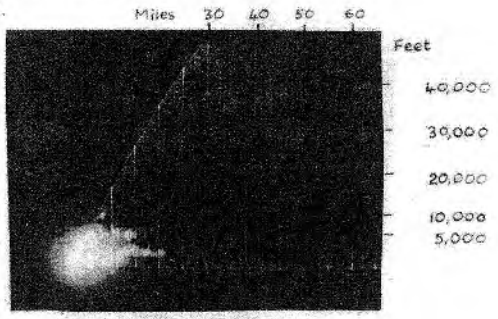
					Larkhill		Hemsby		
					Time (GMT)	Height (feet)	Time (GMT)	Height (feet)	
8/3/52	1000 -1200	0 to 5,000	250 - 260°T 50 - 60 kt. 280°T 35kt.	230°T 20 - 25kt.	0300 1500	9710 -10,700 3710 - 4630	0300 1500	0 - 960 960 - 2080 6000 - 6950 9220 - 9850	Followed weather echoes moving east and gradually died out from the west.
10/3/52	1000 -1230	2,000 to 4,000	300 - 310°T 40 - 45 kt.	310°T 18 - 24kt.	0300 1500	2340 - 3250 3350 - 3650	0300 1500	0 - 610 610 - 1180 3520 - 4360 4510 - 5000 8880 - 9260	Numerous echoes. Weak ridge of high pressure. Variable cloud.
20/3/52 "	1100 -1400 1730 -1740	2,000 to 5,000 0 to 3,000	290 - 300°T 50 - 60 kt. 285 - 290°T 50 - 55 kt.	290-300°T 23 - 28 kt. 310°T 20 - 30 kt.	0300 1500	1700 - 3120 9750 -10750	0900 1500	1580 - 3000 3000 - 3250 7210 - 8050	Very many echoes. Few at 1100 but developed rapidly in next 30 min. Weak cold front with clearance of cloud moved SE as echoes developed.
21/3/52 "	1030 -1200 1730 -1800	4,000 to 5,000 2,000	270 - 285°T 36 - 45 kt. 235 - 260°T 45 - 63 kt. (one from 295°T 45 kt.)	305 - 310°T 13 - 17 kt. About 240°T 20 kt.	0300 1500	6750 - 7760 8630 - 9370 2890 - 3500 3500 - 4810 6900 - 7860	0300 0900 1500 2100	6420 - 7490 5520 - 6310 6310 - 6730 4950 - 5550 8900 - 9460 0 - 1420 1760 - 2610 3790 - 4100 4710 - 6100 7610 - 8070	Pin-point echoes. Mainly cloudy, weak ridge ahead of warm front. Pin-point echoes ahead of warm front weather echoes.
22/3/52	1030 -1130	3,000 to 5,000	270 - 280°T 85 - 90 kt.	280°T 45 kt.	0300	3340 - 4630	0300 0900	2990 - 4180 5350 - 6000	Few pin-point echoes ahead of cold front moving SE.



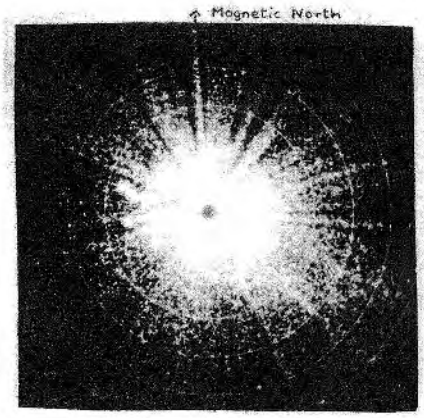
Photograph (i) — P.P.I.
12 54 G.M.T. 20th MARCH 1952
First visible range marker at 10 miles. Shaded area — permanent echoes.



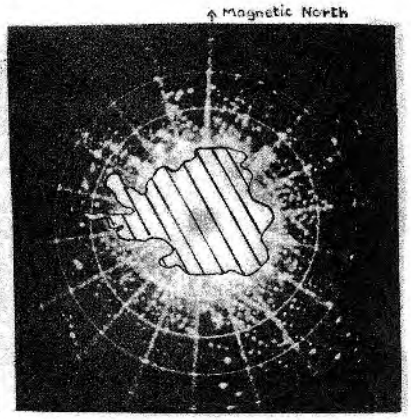
Photograph (ii) — H.R.T.
11 38 G.M.T. 20th MARCH 1952
Bearing 021° Mag.



Photograph (iii) — H.R.T.
21 50 G.M.T. 5th MARCH 1952
Bearing 035° Mag.



Photograph (iv) — P.P.I.
21 52 G.M.T. 5th MARCH 1952
Farthest range marker — 30 miles



Photograph (v) — P.P.I.
Time exposure — 4 revolutions of aerial
12 58.35 13 02.49 G.M.T. 20th MARCH 1952

UNUSUAL RADAR ECHOES OBSERVED AT EAST HILL

Range markers on all photographs (circular on P.P.I., vertical on H.R.T.) at 5-miles intervals